

## CURRICULUM VITAE

January, 2017

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**Education:**

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| 1992 Ph.D. | University of Minnesota, Minneapolis, Minnesota<br>Major: Biostatistics<br>Thesis advisor: Thomas A. Louis |
| 1984 M.S.  | University of Minnesota, Minneapolis, Minnesota<br>Major: Statistics                                       |
| 1981 B.A.  | National Cheng-Chi University<br>Major: Statistics   |

**Professional Experience:**

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| 1981 – 1982 | <i>Teaching Assistant.</i> National Cheng-Chi University   |
| 1982 – 1984 | <i>Teaching Assistant.</i> University of Minnesota, Department of Statistics, Minneapolis, Minnesota   |
| 1984 – 1985 | <i>Statistician, Tor Dahl &amp; Associates</i>   |
| 1985-1988   | <i>Statistical Analyst,</i> Division of Epidemiology, University of Minnesota, Minneapolis, Minnesota  |
| 1988 – 1991 | <i>Research Assistant.</i> Coordinating Centers for Biostatistics Research, University of Minnesota, Minneapolis, Minnesota  |
| 1991 – 1992 | <i>Research Associate.</i> Coordinating Centers for Biostatistics Research, University of Minnesota, Minneapolis, Minnesota. Collaborated with investigators on associating the risk factors with cardiovascular diseases from the data collected from the Multiple Risk Factors in Cardiovascular Disease study, designed AIDS clinical trials, and conducted statistical research with application to clinical trials.   |
| 1992 – 2001 | <i>Mathematical Statistician.</i> NHLBI/NIH, Office of Biostatistics Research. Responsible for providing technical assistance and review to Program Staff on the selection of contracts for Data Coordinating Centers, including development and specification of the work scope and technical oversight. Provided technical direction in the application of statistical methodology to clinical trials. Supported program staff designing and monitoring clinical |

trials. Collaborated with NHLBI investigators in the design and analysis of heart disease studies. Conducted independent statistical research in clinical trials, and health and epidemiological fields.

2001 – Present *Mathematical Statistician*. NCI/NIH, Biometric Research Program, Division of Cancer Treatment and Diagnosis. Collaborating with investigators in Center for Cancer Research (CCR), NCI on the design and analysis of genomic studies and clinical studies in the area of radiation oncology, neuro oncology, pediatric oncology, molecular imaging, urologic oncology and medical oncology. Conduct independent research in the development of new methodologies and techniques in mathematical and/or applied statistics applicable to cancer research and related studies.

### **Honors and Awards:**

*University of Minnesota*, Graduate school fellowship, 1991

*Biometric Society (ENAR) John Van Ryzin Best Student Paper Award*, prize competition for student papers presented at Biometric Society (ENAR) Spring Meetings, Houston, Texas, March 1991

*Delta Omega Honorary Public Health Society*, 1992

*Teaching award*, Center for Information Technology, National Institutes of Health, 2006

*Fellow of the American Statistical Association*, May 2007

### **Professional Societies:**

American Statistical Association

Biometric Society

International Chinese Statistical Association

### **Professional Activities:**

#### **Editorship:**

1999 – 2003	<i>Associate Editor, Controlled Clinical Trials</i>
2000 – 2001	<i>Associate Editor, Lifetime Data Analysis</i>
2006 – Present	<i>Associate Editor, Statistics in Medicine</i>
2008 – 2010	<i>Associate Editor, Statistica Sinica</i>
2012 – Present	<i>Associate Editor, Journal of the American Statistical Association, Application &amp; Case Studies</i>

#### **Elected Officer:**

2004 – 2005	<i>Treasurer, Biometric Society (ENAR)</i>
2009 – 2011	<i>Member, Biometric Society (ENAR) Regional Committee Board</i>

#### **Committee Appointments:**

1995	<i>Member, ENAR Spring Meeting Program Committee</i>
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1999	<i>Member, ENAR Student Paper Award Committee</i>
2002	<i>Member, ENAR Education Advisory Committee</i>
2002	<i>Program Chair, ENAR 2002 Spring Meeting, Washington D.C.</i>
2002-2004	<i>Member, ENAR Regional Advisory Board</i>
2003-2005	<i>Member, American Statistical Association Committee on Meetings</i>

#### **Organizing Invited Sessions:**

1995	Organizer and Chair of the invited session entitled “Analysis of Multivariate Survival Data“, ENAR Spring Meeting, Birmingham, Alabama
2002	Organizer of the invited session entitled “Recent Advances in Estimating Diagnostic Error Without a Gold Standard“, ENAR Spring Meeting, Washington D.C.
2006	Organizer of the invited session entitled “Recent Advances in the analysis of association for multivariate failure time data“, ENAR Spring Meeting, Tampa, Florida

#### **Teaching Experience:**

##### Lectures:

1996-2001	Lectures on survival analysis in Core Curriculum in Clinical Research course, National Institute of Health.
1998	Basic principles of survival analysis, National Heart, Lung and Blood Institute.

##### Short Courses:

2002-2010	Statistical analysis of gene expression microarray data, National Institute of Health.
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#### **Mentoring Post-doc Fellows:**

2001-2005	Aleksandra M. Michalowska
2003-2005	Huaitian Liu

#### **Data Safety and Monitoring Board:**

2000-2007	Member, hematology intramural Data and Safety Monitoring Board, National Heart, Lung and Blood Institute (NHLBI)
2010-Present	Member, NIAID Hematopoietic Stem Cell Transplant Data Safety Monitoring Board
2015-Present	Member, NIAID Autoimmune Data Safety Monitoring Board

**Journal Reviewer:** Statistics in Medicine, Biometrics, Biometrika, Biostatistics, Biometrical Journal, Journal of the Royal Statistical Society Series B, Statistica Sinica, Journal of the American Statistical Association, Controlled Clinical Trials, Lifetime Data Analysis, Journal of Statistical Computation and Simulation, Computational Statistics and Data Analysis, Annals of Applied Statistics, Bioinformatics, Breast Cancer Research, American Journal of

Epidemiology

### **External Grant Review:**

Reviewer for NIAID, 1997

Reviewer for US-Israel Binational Science Foundation, 2001

Reviewer for Academia Sinica, 2010

### **Review for Tenure and Promotion:**

National Cancer Institute, 2002, 2004, 2006

Rutgers University, Department of Biostatistics, 2006

University of Virginia, School of Medicine, 2009, 2011

Emory University, Department of Biostatistics, 2013

### **Internal Committees at NCI:**

Steering Committee member, Mouse Models of Mammary Cancer Collective, 2003-2005

### **Major Committees of Clinical Trials:**

1993-2001	Member, T-cell Depletion Trial (TCD), National heart, Lung and Blood Institute
1994-2001	Member, Steering Committee, Atrial Fibrillation follow-up Investigation of Rhythm Management (AFFIRM) Study, National Heart, Lung and Blood Institute
1994-2001	Member, Activity Counseling Trial (ACT), National Heart, Lung, and Blood Institute
1998-2001	Member, Steering Committee, Mode Selection Trial (MOST), National Heart, Lung, and Blood Institute
1999-2001	Member, Steering Committee, Multi-ethnic study of Atherosclerosis (MESA) Study, National Heart, Lung, and Blood Institute
1999-2001	Member, Steering Committee, Feasibility of Tetinoid Therapy for Emphysema (FORTE) Clinical Trial, National Heart, Lung, and Blood Institute

### **Peer Reviewed Publications:**

1. Stamler J, Neaton J, Wentworth D, Shih J, Dyer A, Shekelle R, Stamler R. Life styles and life style-related major risk factors: their combined impact in producing epidemic cardiovascular disease, and the potential for prevention. Multiple Risk Facotrs in Cardiovascular Disease edited by Chobanian A, Gotto A, Lenfant C, Paoletti R, Zanchetti A, 1991.
2. Neaton J, Blackburn H, Jacobs D, Kuller-Lee D, Sherwin R, Shih J, Stamler J, Wentworth D. Serum cholesterol and mortality: findings for men screened in the Multiple Risk Factor Intervention Trial. *Archives of Internal Medicine* 152: 1490-1500, 1992.

3. Flack J, Neaton J, Grimm R, **Shih J**, Cutler J, Ensrud K, McMahon S. Blood pressure and mortality among men with prior myocardial infarction. *Circulation* 92: 2437-45, 1992.
4. **Shih JH** and Louis TA. Assessing gamma frailty models for clustered failure time data. *Lifetime Data Analysis* 1: 205-20, 1995
5. **Shih JH**. Sample size calculation for complex clinical trials with survival time endpoints. *Controlled Clinical Trials* 16: 395-407, 1995.
6. **Shih JH** and Louis TA. Inferences on the association parameter in copula models for bivariate survival data. *Biometrics* 51: 1384-99, 1995.
7. **Shih JH** and Louis TA. Tests of independence for bivariate survival data. *Biometrics* 52: 1440-49, 1996.
8. Dugi KA, Feuerstein IM, Hill S, **Shih JH**, Santamarina-Fojo S, Brewer HB Jr, Hoeg JM. Lipoprotein lipase correlates positively and hepatic lipase inversely with calcific atherosclerosis in homozygous familial hypercholesterolemia. *Arteriosclerosis, Thrombosis, and Vascular Biology* 17: 354-64, 1997.
9. Wyse DG, Anderson JL, Antman EM, Cooper ES, Dalquist JE, Davis KB, Greene HL, Mickel MC, Dimarco JP, Domanski MJ, Rosenbert Y, Schron EB, **Shih JH**, Epstein AE, Gersh BJ, Jenkins LS, Saksena S, Sherman DG, Steinberg JS, Waldo AL. Atrial fibrillation follow-up investigation of rhythm management – The AFFIRM study design. *American Journal of Cardiology* 79: 1198-1202, 1997.
10. Blair SN, Applegate WB, Dunn AL, Ettinger WH, Haskell WL, King AC, Morgan TM, **Shih JH**, and Simons-Mortan D.G. (1998). Activity Counseling Trial (ACT): Rationale, Design, and Methods. *Medicine and Science in Sports and Exercise* 30: 1097-1106, 1998.
11. **Shih JH**. A goodness-of-fit test for association in a bivariate survival model. *Biometrika* 85: 189-200, 1998
12. Fay MP, **Shih JH**. Permutation tests using estimated distribution functions. *Journal of the American Statistical Association* 93: 387-96, 1998.
13. **Shih JH**. Modeling multivariate discrete failure time data. *Biometrics* 54: 330-43, 1998.
14. **Shih JH** and Fay MP. A class of permutation tests for stratified survival data. *Biometrics* 55: 1156-61, 1999.
15. **Shih JH** and Albert PS. Latent model for correlated binary data with diagnostic error. *Biometrics* 55: 1232-35, 1999.
16. Mohiddin SA, Begley D, **Shih JH**, Fananapazir L. Myocardial bridging does not predict sudden death in children with hypertrophic cardiomyopathy but is associated with more severe cardiac disease. *Journal of American College of cardiology* 36:2270-78, 2000.
17. Chatterjee N, **Shih JH**, Hartge P, Brody L, Tucker M, Wacholder S. Association and aggregation analysis using kin-cohort designs with applications to genotype and family history data from the Washington Ashkenazi Study. *Genetic Epidemiology* 21: 123-138, 2000.
18. Fananapazir L, Mohiddin SA, Begley D, **Shih JH** (2001). Myocardial bridging does not predict sudden death in children with hypertrophic cardiomyopathy but is associated with more severe cardiac disease - Reply. *Journal of American College of Cardiology* 38, 922.

19. Simons-Morton DG, Morgan T, Haskell W, King A, Applegate W, Blair S, Albright C, Cohen S, Ribisl P, O'Toole M, **Shih J**. Effects of physical activity counseling in primary care – The activity counseling trial: A randomized controlled trial. *Journal of American Medical Association* 286: 677-87, 2001.
20. Albert PS, McShane LM, **Shih JH** and the U.S. National Cancer Institute Bladder Tumor Marker Network. Latent modeling approaches for assessing diagnostic error in P53 immunohistochemical assays in bladder cancer without a gold standard. *Biometrics* 57: 610-19, 2001.
21. Proschan MA, McMahon RP, **Shih JH**, Hunsberger SA, Geller NL, Wittes J, Knatterud G. Statistical properties of the Wittes, Lakatos, and Probstfield imputation method in clinical trials. *Journal of Statistical Planning and Inference* 96: 155-65, 2001.
22. Chatterjee N, **Shih JH**. A bivariate mixture model for modeling familial association in diseases. *Biometrics* 57: 779-86, 2001.
23. **Shih JH**. An Introduction to survival analysis. *Principles and practice of clinical research*, Gallin, J.I. (editor), 259-66, 2002.
24. **Shih JH** and Chatterjee, N. Survival analysis of family data from case- control studies. *Biometrics* 58: 502-09, 2002.
25. Vasselli J, **Shih JH**, Iyengar SR, Maranchie J, Riss J, Worrell R, Torres-Cabala C, Tabios R, Mariotti A, Stearman R, Merino R, Walther MW, Simon R, Klausner R, Linehan WM. Predicting survival in patients with metastatic kidney cancer by gene expression profiling in the primary tumor. *Proceedings of National Academy of Sciences*, 100: 6958-63, 2003.
26. Su H, Hu N, **Shih J**, Hu Y, Wang O, Chuang EY, Roth MJ, Wang C, Goldstein AM, Ding T, Dawsey SM, Giffen C, Emmert-Buck MR., Taylor PR. Gene expression in esophagea squamous cell carcinoma reveals highly consistent molecular profiles and is related to a family history of upper gastrointestinal cancer. *Cancer Research*, 63: 3872-76, 2003.
27. **Shih JH** and Fay MP. A class of permutation tests for some two-sample survival data problems. *Contemporary biostatistical issues in clinical trials*, Geller, N. (editor), 141-60, 2003.
28. Dobbin K, **Shih JH** and Simon R. Statistical design of reverse dye microarrays. *Bioinformatics* 19: 803-10, 2003.
29. Dobbin K, **Shih JH** and Simon R. Questions and answers on design of dual-label microarrays for identifying differentially expressed genes. *Journal of the National Cancer Institute* 95: 1362-69, 2003.
30. Albert PS and **Shih JH**. Modeling tumor growth with random onset. *Biometrics* 59: 897-906, 2003.
31. Chatterjee N and **Shih JH**. On use of bivariate survival models with cure fraction. *Biometrics* 59: 1184-85, 2003.
32. McShane LM, **Shih JH** and Michalowska AM. Statistical issues in the design and analysis of microarray studies in animal models. *Journal of Mammary Gland Biology and Neoplasia* 8 359-74, 2003.
33. Fukuoka J, Fujii T, **Shih JH**, Dracheva T, Hewitt S, Travis WD, Jen J. Chromatin remodeling factors in non-small cell lung cancer, cellular location of BRM and coexpression with BRG1 are important prognostic indicators. *Clinical Cancer Research* 10: 4314-24, 2004.

34. Desai KV, Michalowska A, Kondaiah P, Ward JM, **Shih JH**, and Green JE. Gene expression profiling identifies Pten as a candidate apoptosis mediator in androgen depleted rat ventral prostate. *Molecular Endocrinology* 18:2895-2907, 2004.
35. Donninger H, Bonome T, Radonovich M, Pise-Massion C, Brady J, **Shih JH**, Barrett JC, and Birrer M. Whole genome expression profiling of advance stage papillary serous ovarian cancer reveals activated pathways. *Oncogene* 23: 8065-77, 2004.
36. **Shih JH**, Michalowska AM, Dobbin K, Ye Y, Qiu TH, Green JE. Effects of pooling mRNA in microarray class comparisons. *Bioinformatics* 20: 3318-25, 2004.
37. Dobbin K, **Shih JH** and Simon R. Comment on "Evaluation of the gene specific dye bias in cDNA microarray experiments". *Bioinformatics* 21: 2803-04, 2005.
38. Tsurutani J, Fukuoka J, Tsurutani H, **Shih JH**, Hewitt SM, Jen J and Dennis PA. Evaluation of two phosphorylation sites improves the prognostic significance of Akt activation in NSCLC tumors. *Journal of Clinical Oncology* 24:306-14, 2006.
39. Mayburd AL, Martinez A, Sackett D, Liu H, **Shih JH**, Tauler J, Avis I, Mulshine JL. Ingenuity network assisted transcription profiling: Identification of new pharmacological mechanism for MK886. *Clinical Cancer Research* 12: 1820-27, 2006.
40. Chatterjee N, Zeynep K, **Shih JH** and Gail M. Case-control study with family history data: a combined approach of kin-cohort and case-control analysis. *Biometrics* 62: 36-48, 2006.
41. Wang H, Owens JO, **Shih JH**, Li M, Bonner RF, Mushinski JF. Histological staining method preparatory to laser capture microdissection significantly affects detection of mRNAs in microarray hybridization. *BMC Genomics* 7:97, 2005.
42. Lu SE, **Shih JH**. Case-cohort designs and analysis of clustered failure time data. *Biometrics* 62: 1138-48, 2006.
43. Fukuoka J, Dracheva T, **Shih JH**, Hewitt SM, Travis, WD, and Jen J. Desmoglein 3 as a prognostic indicator for pulmonary carcinoid tumors. *Human Pathology* 38:276-83, 2007.
44. Lusa L, McShane LM, Radmacher MD, **Shih JH**, Wright GW, Simon R. Appropriateness of some resampling-based inference procedures for assessing performance of prognostic classifiers derived from microarray data. *Statistics in Medicine* 26:1102-13, 2007.
45. Johnson L and **Shih JH**. An Introduction to survival analysis. *Principles and practice of clinical research 2<sup>nd</sup> edition*, Gallin, J.I. (editor): 259-66, 2007.
46. Chatterjee N, Zeynep K, **Shih JH** and Gail M. Rejoinder to the letter to editor from C. Begg. *Biometrics* 63: 965-66, 2007.
47. Park ES, Lee JS, Woo HG, Zhan F, **Shih JH**, Shaughnessy JD, Mushinski JF. Heterologous Tissue Culture Expression Signature Predicts Human Breast Cancer Prognosis. *PLoS ONE* Jan 3;2:e145, 2007.
48. Deeb KK, Michalowska AM, Yoon CY, Krummey SM, Hoenerhoff MJ, Kavanaugh C, Li MC, Demayo FJ, Linnoila I, Deng CX, Lee E YH, Medina D, **Shih JH**, Green, JE. An integrated cancer genetic network predicts aggressive human carcinomas with poor prognosis. *Cancer Research* 67:8065-80, 2007.

49. Shilo K, Dracheva T, Mani H, Fukuoka J, Sesterhenn I, Chu WS, **Shih JH**, Jen J, Travis W, Franks T. Alpha-methylacyl CoA Racemase (AMACR) in Pulmonary Adenocarcinoma, Squamous Cell Carcinoma and Neuroendocrine Tumors: Expression and Survival Analysis. *Archives of Pathology & Laboratory Medicine* 31:1555-60, 2007.
50. Tang B, Yoo N, Vu M, Mamura M, Nam J, Ooshima A, Desprez P, Anver M, **Shih JH**, Parks T, Wakefield LM. TGF- $\alpha$  can function as a tumor suppressor in breast cancer through effects on the cancer stem cell and committed progeny that are independent of its antiproliferative activity. *Cancer Research* 67:8643-52, 2007.
51. **Shih JH** and Lu SE. Analysis of failure time data with multi-level clustering, with application to the child vitamin A intervention trial in Nepal. *Biometrics* 63:673-80, 2007.
52. **Shih JH**. Sample size considerations for morbidity/mortality trials. *Wiley Encyclopedia of Clinical Trials* DOI: 10.1002/9780471462422, 2008.
53. Fenton JJ, Lavigne LA, Perkins SN, Liu H, Chandramouli G, **Shih JH**, Hord NG, Hursting SD. Microarray analysis reveals that leptin induces autocrine/paracrine cascades to promote survival and proliferation of colon epithelial cells in an Apc genotype dependent fashion. *Molecular Carcinogenesis* 47: 9-21, 2008.
54. Landi MT, Dracheva T, Rotunno M, Figueroa JD, Liu H, Dasgupta A, Mann F, Fukuoka J, Hames M, Bergen A, Murphy SE, Yang P, Pesatori AC, Consonni D, Bertazzi PA, Wacholder S, **Shih JH**, Caporaso N, Jen J. Gene expression signature of cigarette smoking and its role in lung adenocarcinoma risk and survival. *PLoS ONE* 3(2):e1651, 2008.
55. Bonome T, Levine DA, **Shih JH**, Randonovich M, Pise-Masison CA, Brady J, Barrett, JC, Boyd J, Birrer MJ. Identification of a gene signature predicting for survival in sub-optimally debulked patients with high-grade papillary serous ovarian cancer. *Cancer Research* 68:5478-86, 2008.
56. Calvo KR, Dabir B, Kovach A, Devor C, Bandle R, Bond A, **Shih JH**, Jaffe ES. IL-4 protein expression and basal activation of Erk *in vivo* in follicular Lymphoma. *Blood* 112: 3818-26, 2008.
57. Orina JN, Calcagno AM, Wu CP, Varma S, **Shih JH**, Lin M, Eichler G, Weinstein JN, Pommier Y, Ambudkar SV, Gottesman MM and Gillet JP. Generation of an improved drug discovery repository using high-throughput Taqman low density arrays. *Mol Cancer Ther* 8:2057-66, 2009.
58. **Shih JH**, Lu SE. Semiparametric estimation of a nested random effects model for the analysis of multi-level clustered failure time data. *Journal of Computational Statistics and Data Analysis* 53:3864-71, 2009.
59. Albert PS, **Shih JH**. On estimating the relationship between longitudinal measurements and time-to-event data using a simple two-stage procedure. *Biometrics* 66, 983-87, 2010.
60. Albert PS, **Shih JH**. An approach for jointly modeling multivariate longitudinal measurements and time-to-event data. *The Annals of Applied Statistics* 4,1517-32, 2010.
61. **Shih JH**, Albert, PS. Modeling familial association of ages at onset of diseases in the presence of competing risk. *Biometrics* 66:1012-23, 2010.
62. Tauler J, Zudaire E, Liu H, **Shih J**, Mulshine JL. hnRNP A2/B1 modulates epithelial-mesenchymal transition in lung cancer cell lines. *Cancer Research* 70:7137-47, 20210.



63. Turkbey B, Shah VP, Pang X, Bernado M, Xu S, Kruecker J, Locklin J, Baccala AA, Rastinehad AR, Merino MJ, **Shih JH**, Wood BJ, Pinto PA, Choyke PL. Is apparent diffusion coefficient associated with clinical risk scores for prostate cancers that are visible on 3-T MR images? *Radiology* 258:488-95, 2010.
64. Rastinehad AR, Baccal AA, Chung PH, Proano JM, Kruecker J, Xu S, Lockin JK, Turkbey B, **Shih J**, Linehan WM, Glossop ND, Choyke PL, Wood BJ, Pinto PA. D'Amico Risk Stratification Correlates with Degree of Suspicion of Prostate Cancer on Multi-Parametric Magnetic Resonance Imaging (MRI). *Journal of Urology* 185:815-20, 2011.
65. Steffen-Smith EA, **Shih JH**, Warren KE. Proton magnetic resonance spectroscopy predicts survival in children with diffuse intrinsic pontine glioma. *Journal Neuro-Oncology* 105:365-73, 2011.
66. Hipp SJ, Steffen-Smith EA, Hammoud D, **Shih JH**, Bent R, Warren KE. Predicting outcome of children with diffuse intrinsic pontine gliomas using multiparametric imaging. *Neuro-Oncology* 13,904-9, 2011.
67. Kreisl TN, Zhang W, Odia Y, **Shih J**, Butman JA, Hammoud D, Iwamoto F, Su J, Fine HA. A Phase II Trial of Single Agent Bevacizumab in Patients with Recurrent Anaplastic Glioma. *Journal of Neuro-Oncology* 13:1143-50, 2011.
68. Turkbey B, Mani H, Shah VJ, Rastinehad AR, Bernardo M, Pohida T, Pang Y, Daar D, Benjamin C, McKinney YL, Trivedi H, Chua C, Bratslavsky G, **Shih JH**, Linehan WM, Merino MJ, Choyke PL, Pinto PA. Multiparametric 3T prostate MR imaging to detect cancer: histopathologic correlation using prostatectomy specimens processed in customized MRI-based molds. *Journal of Urology* 186:1818-24, 2011.
69. Zhang C, Elkahoul AG, Robertson M, Gills JJ, Tsurutani J, **Shih JH**, Fukuoka J, Hollander C, Harris CC, Travis WD, Jen J, Dennis PA. Loss of cytoplasmic CDK1 predicts poor survival in human lung cancer and confers chemotherapeutic resistance. *Plos One* 6(8):e23849, 2011.
70. Pinto PA, Chung PH, Rastinehad AR, Baccala AA, Kruecker J, Benjamin CJ, Xu X, Yan P, Kadoury S, Chua C, Locklin JK, turkbey B, **Shih JH**, Gates SP, Buckner C, Bratslavsky G, Linehan WM, Glossop ND, Choyke PL, Wood BJ. Magnetic resonance imaging/ultrasound fusion guided prostate biopsy improves cancer detection following transrectal ultrasound biopsy and correlates with multiparametric magnetic resonance imaging. *Journal of Urology* 186:1281-85, 2011.
71. Rotunno M, Hu N, Su H, Wang C, Goldstein AM, Bergen AW, Consonni D, Pesatori AC, Bertazzi, PA, Wacholder S, **Shih JH**, Caporaso NE, Taylor PR, Landi MT. A gene expression signature from peripheral whole blood for stage I lung adenocarcinoma. *Cancer Prevention Research* 4:1599-608, 2011.
72. Fay MP, **Shih JH**. Weighted logrank tests for interval censored data when assessment times depend on treatment. *Statistics in Medicine* 31: 3760-62, 2012.
73. Shuch B, Bratslavsky G, **Shih J**, Vourganti S, Finley D, Castor B, Treat E, Linehan WM, Pantuck AJ, Said J, Belldegrun AS. Impact of pathologic tumor characteristics in patients with sarcomatoid renal cell carcinoma. *British Journal of Urology* 109:1600-16, 2012.
74. Chen J, Petrus M, Bamford R, **Shih JH**, Morris JC, Janik JE, Waldmann TA. Increased serum soluble interleukin-15 receptor alpha (sIL-15R $\alpha$ ) levels in T cell large granular lymphocyte leukemia. *Blood* 119:137-43, 2012.
75. Simone NL, Dan T, **Shih JH**, Smith SL, Sciuto L, Lita E, Swain SM, Danforth D, Camphausen K. Twenty-five year results in the treatment of early stage breast carcinoma with mastectomy versus breast conservation therapy: the National Cancer Institute randomized trial. *Breast Cancer Research and Treatment* 132:197-203, 2012.

76. Yan W, **Shih J**, Rodriguez-Canales J, Hipp J, Player A, Hu N, Goldstein AM, Taylor PR, Emmert-Buck MR, Erickson HS. Identification of unique therapeutic targets in esophageal squamous cell carcinoma. *BMC Research Notes* doi: 10.1186/1756-0500-5-73, 2012.
77. Warren KE, Bent R, Wolters PL, Prager A, Hanson R, Packer R, **Shih J**, Camphausen K. A phase II study of pegylated interferon Alfa-2b (PET-Intron®) in children with diffuse intrinsic protine glioma. *Cancer* 118:3607-13, 2012.
78. Kurdziel KA, **Shih JH**, Linderberg ML, Apolo AB, Mena E, McKinney Y, Turkbey IB, Dahut W, Gulley JL, Madan R, Landgren O, Choyke PL. The kinetics and reproducibility of 18F-sodium fluoride (NaF) using current PET camera technology. *J Nuclear Medicine* 53:1175-84, 2012.
79. Scott JG, Bauchet L, Fraum TJ, Nayak L, Cooper AR, Reiner AS, Chao ST, Suh JH, Vogelbaum,MA, Peerboom DV, Zouaoui SZ, Mathieu-Daude H, Fabbro-Peray P, Rigau V, Taillandier L, Abrey LE, DeAngelis LM, **Shih JH**, Iwamoto FM. Recursive partitioning analysis identifies prognostic groups for glioblastoma patients aged 70 years or older. *Cancer* 118:5596-600, 2012.
80. Ou W, Delisle J, Jacques J, **Shih J**, Price G, Kuhn JH, Wang V, Verthelyi D, Kaplan G, Wilson CA. Induction of ebolavirus cross-species immunity using retrovirus-like particles bearing the Ebola virus glycoprotein lacking the mucin-like domain. *Virology Journal* 9:32 doi:10.1186/1743-422X-9-3, 2012.
81. Yan W, **Shih JH**, Rodriguez-Canales J, Tangera MA, Diao L, Hu N, Goldstein AM, Wang J, Taylor PR, Lippman SM, Wistuba II, Emmert-Buck MR, Erickson HS. Three-dimensional mRNA measurements reveal minimal heterogeneity in esophageal squamous cell carcinoma. *American Journal of Pathology* 182:529-39, 2013.
82. Milenic D, Kwamena B, Wong K, **Shih J**, Brechbiel M. Evaluation of platinum chemotherapy in combination with HER2 targeted  $\alpha$ -particle radiation. *Cancer Biotheo Radiopharm* 28:441-9, 2013.
83. Kreisl TN, McNeill KA, Sul J, Iwamoto FM, **Shih J**, Fine HA. A phase I/II trial of vandetanib for patients with recurrent malignant glioma. *Neuro Oncology* 14:1519-26, 2013.
84. Kreisl TN, Smith, P, Sul J, Salgado C, Iwamoto FM, **Shih JH**, Fine HA. Continuous daily sunitinib for recurrent glioblastoma. *Journal of Neurooncology* 11:41-8, 2013.
85. **Shih JH**. Copula models and analysis for multivariate failure time data. In Klein, J, Ibrahim, J, Scheike, T, Houwelingen, HV, editors, *Handbook of Survival Analysis*, pp. 489-510, 2013.
86. Chen J, Pise-Masison CA, **Shih JH**, Morris JC, Janik JE, Conlon KC, Keating A, Waldmann TA. Markedly additive antitumor activity with the combination of a selective surviving suppressant YM155 and alemtuzumab in adult T-cell leukemia. *Blood* 121:2029-37, 2013.
87. Mena E, Lindenberg ML, Turkbey BI, **Shih J**, Logan J, Adler SS, Wong KJ, Wilson W, Choyke PL, Kurdziel KA. A pilot study of the value of  $^{18}\text{F}$ -Fluoro-deoxy-thymidine PET/CT in predicting viable lymphoma in residual  $^{18}\text{F}$ -FDG avid masses following completion of therapy. *Clinical Nuclear Medicine* 39:874-81, 2013.
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115. **Shih JH**, Greer MD, Turkbey B. Methods for measuring inter-observation agreement for prospective tumor detection. Submitted.
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117. Valle LF, Greer MD, **Shih JH**, Barrett T, Law YM, Rosenkrantz AB, Shebel H, Muthigi A, Su D, Merino M, Wood B, Pinto P, Krauze AV, Kaushal A, Choyke PL, Turkbey B, Citrin DE. Multiparametric MRI for the detection of local recurrence of prostate cancer in the setting of biochemical recurrence after low dose rate brachytherapy. Submitted.
118. Mehralivand S, Bednarova S, **Shih JH**, Mertan F, Gaur S, Merino MJ, Wood BJ, Pinto PA, Choyke PL, Turkbey B. Prospective evaluation of prostate imaging reporting and data system version 2 (PI-RADSV2) using the international society of urological pathology (ISUP) prostate cancer grade group system. Submitted.

#### **Invited Presentations in Profession Meetings and Seminars**

1. Cigarette smoking and mortality: Data on 361,662 MRFIT primary screenees. Presentation at the National Cancer Institute planning meeting on Smoking and Tobacco Control Program monograph, 1991.
2. Sample size calculation for complex clinical trials. University of Minnesota, 1992.
3. Models and analysis for multivariate failure time data. National Heart, Lung, and Blood Institute, 1992.
4. Models and analysis for multivariate failure time data. National Cancer Institute, 1992.
5. Models and analysis for multivariate failure time data. Department of Biostatistics, University of Washington, 1992.
6. Models and analysis for multivariate failure time data. Division of Biostatistics, University of Rochester, New York, 1992.
7. Models and analysis of multivariate failure time data. Henry Ford Hospital, Michigan, 1992.
8. Models and analysis for multivariate failure time data. Department of Biostatistics, University of Michigan, 1992.
9. Models and analysis for multivariate failure time data. Department of Biostatistics, University of North Carolina, 1992.
10. Models and analysis for multivariate failure time data, Pennsylvania State University, Medical School, 1992.
11. Models and analysis for multivariate failure time data. Wake Forest University, Bowman Gray school of Medicine, 1992.
12. Models and analysis for multivariate failure time data. University of Pennsylvania, Medical school, 1992.

13. Tests of independence of bivariate failure time data, National Heart, Lung, and Blood Institute, 1992.
14. A goodness-of-fit test for association in a bivariate survival model, International Chinese Statistical Association Symposium, 1996.
15. Modeling multivariate discrete failure time data, National Cancer Institute, 1998.
16. Modeling multivariate discrete failure time data, Department of Biostatistics, Johns Hopkins University, 1998.
17. A class of permutation tests for stratified survival data. International Chinese Statistical Association (ICSA) annual meeting, Washington, D.C., 1999.
18. Latent models for correlated binary data with diagnostic error. Joint Statistical Meetings, Baltimore, MD, 1999.
19. A cure model for bivariate failure time data. Department of Biostatistics, Columbia University, New York, 2000.
20. Sample size calculation for complex clinical trials with survival endpoints, Pfizer Cooperation, Connecticut, 2001.
21. Design and Analysis issues in the microarray studies of animal models, Mouse Models of Mammary Cancers Retreat, Gaithersburg, MD, 2003.
22. Design, analysis and interpretation of microarray gene expression data (II), National Institute of Child Health and Development, 2003.
23. Design, analysis and interpretation of microarray gene expression data (I), National Institute of Child Health and Development, 2003
24. A bivariate cure-mixture approach for modeling familial association in diseases, Joint Statistical Meetings, San Francisco, 2003.
25. Analysis of survival data from case-control family studies. Johns Hopkins University, Department of Biostatistics, 2003.
26. Estimating relative risk, cumulative risk and familial aggregation from case-control designs with genotype and family history data, University of Medicine and Dentistry of New Jersey, Department of Biostatistics, 2004.
27. Effects of pooling mRNA in microarray class comparisons. Lombard Comprehensive Cancer Center, Georgetown University, 2005.
28. Effects of pooling mRNA in microarray class comparisons. International Chinese Statistical Association Annual Meeting, 2005.
29. Analysis of failure time data with multi-level clustering, with application to the child intervention trial in Nepal. ENAR, Tampa, Florida, 2006.
30. Analysis of failure time data with multi-level clustering, with application to the child intervention trial in Nepal. Division of Biostatistics, Albert Einstein College of Medicine of Yeshiva University, Spring 2007.
31. Semiparametric approaches for the analysis of multi-level failure time data. University of Maryland Cancer Center, Spring 2007.

32. Semiparametric approaches for the analysis of multi-level failure time data. Joint Statistical Meetings, Salt Lake City, Utah, 2007.
33. Modelling familial association of ages of onset of disease in the presence of competing risk. Joint Statistical Meetings, Colorado, 2008
34. Modelling familial association of ages of onset of disease in the presence of competing risk. National Heart, Lung, and Blood Institute, 2008.
35. Modelling familial association of ages of onset of disease in the presence of competing risk., Queen's University, Canada, September, 2009.
36. Modelling familial association of ages of onset of disease in the presence of competing risk, University of Pennsylvania, October, 2010.
37. Modelling familial association of ages of onset of disease in the presence of competing risk. National Institute of Child Health and Human Development, 2011.
38. Discussant of Byar Award Sessions, Joint Statistical Meetings, San Diego, California, 2012.
39. Modeling the type and timing of consecutive events: application to predicting preterm birth in repeated pregnancies, Joint Statistical Meetings, Boston, Massachusetts, 2014
40. Modeling the type and timing of consecutive events: application to predicting preterm birth in repeated pregnancies, National Institute of Child Health and Human Development, 2015
41. Modeling the type and timing of consecutive events: application to predicting preterm birth in repeated pregnancies, Johns Hopkins University, 2015.
42. Pearson's Chi-square Test and Rank Correlation Inferences for Clustered Data. Johns Hopkins University, 2016.
43. Methods for measuring inter-observer agreement on prospective tumor detection. Molecular Imaging Program, National Cancer Institute, 2016.
44. Prostate cancer risk prediction and evaluation. Molecular Imaging Program, National Cancer Institute, 2016.
45. Pearson's Chi-square Test and Rank Correlation Inferences for Clustered Data. ICSA International conference, Shanghai, China, 2016.

### **Contributed Talks in Statistical Meetings**

1. Models and analysis for multivariate failure time data, Eastern North American Region International Biometric Society (ENAR) Meeting, Houston, Texas, 1992.
2. Tests of independence for bivariate failure time data, Eastern North American Region International Biometric Society (ENAR) Meeting, Cleveland, Ohio, 1994.
3. Assessing gamma frailty models for clustered failure time data, Lifetime Data: Models in Reliability and Survival Analysis Symposium, Boston, Massachusetts., 1995.

4. Modeling multivariate discrete failure time data, Eastern North American Region International Biometric Society (ENAR) Meeting, Richmond, Virginia, 1996.
5. A goodness-of-fit test for association in a bivariate survival model, Eastern North American Region International Biometric Society (ENAR) Meeting, Memphis, Tennessee, 1997.
6. Latent models for correlated binary data with diagnostic error, Eastern North American Region International Biometric Society (ENAR) Meeting, Pittsburgh, Pennsylvania, 1998..
7. A class of permutation tests for stratified failure time data, Eastern North American Region International Biometric Society (ENAR) Meeting, Atlanta, Georgia, 1999.
8. Effects of pooling mRNA in microarray class comparisons, Joint Statistical Meetings, Toronto, Canada, 2004.